**IT Applications Unit 3, AOS 1, Online Communities**

**Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80**

**Problem-solving Methodology: 4 Stages**

Analyse

Design

Development

Evaluate

**Case Study:**

Indigenous Language Trust, (ILT)

Using the case study on page 61 to complete the following:

**ANALYSIS OF THE PROBLEM:**

**This stage involves the following three steps:**

**DETERMINING THE SOLUTION REQUIREMENTS:**

1. **What needs to be established?**

You need to establish what information needs to be provided, what data is needed and what functionality must be included in the website solution.

1. **How is the problem best defined?**

The problem is best defined by writing a simple statement and then rewriting it as a question that directs or indicates a desired course of action.

1. **The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.**

Efficiency refers to the time, cost and effort that might be out into producing a solution and effectiveness can be defined by the quality, relevancy, timeliness and clarity of the solution.

1. **What type of organisation is the ILT?**

The ILT is a not for profit organisation.

1. **In your own words, define the problem for ILT.**

ILT have an inefficient management of data because of time differences and communication methods, this then affects the quality of the information within the organisation making it less effective.

**IDENTIFYING DATA AND INFORMATION NEEDED FOR THE SOLUTION, P 62;**

**Need to identify where data is coming from for online community – inside or outside**

* 1. **In the ILT case study what is the information needed for the solution?**

In the case of the ILT data is needed from within the organisation such as policy documents and contacts and from outside the organisation data about the history of the indigenous is needed.

**IDENTIFYING THE FUNCTIONS NEEDED FOR THE ONLINE COMMUNITY SOLUTION, P 63**

**The functions needed for online communities can be separated into 2 distinct categories,**

* + - **How the solution functions and**
    - **Attributes of the solution. List the characteristics of each of these.**
  1. **What are the functions of the ILT website solution?**
* To broadcast information to the community about events and projects
* To exchange information between offices
* To encourage community groups to exchange information in a secure environment
* To store organisations documents in a central secure environment.

**IDENTIFY THE CONSTRAINTS ON THE SOLUTION, P 64**

* 1. **List the technical and non-technical constraints.**

**Technical:**

* The cost of the solution
* Speed or time that it takes to exchange information
* How secure the solution needs to be, wether the solution needs to be open or closed
* The number of people accessing the online community.

**Non-technical:**

* Issues of privacy when exchanging information
* Copyright issues when exchanging information
* Cultural, gender or age constraints that need to be considered.
  1. **What are the constraints on the ILT solution?**

There are constraints regarding the use of image of deceased Aboriginals and the use of their names on documents.

**DETERMINE THE SCOPE OF THE SOLUTION, P 66**

* + 1. **What needs to be considered in the scope of the solution?**

When determining the scope of the solution, we need to consider the benefits the solution will have on efficiency and effectiveness within the organisation. The scope clearly outlines what the solution can and can’t do. It also provides guidelines for an appropriate solution.

* + 1. **In the ILT case study list the benefits or the scope of the solution in terms of** 
       1. **Efficiency**
* **Time:** the time taken to access and exchange information via the website.
* **Cost:** the cost associated with information exchange will be reduced
* **Effort:** Effort will be reduced from the ease of use of the website.
  + - 1. **Effectiveness**
* **Quality:** The quality of the decision making will be higher due to the collaborative nature of the website and information exchange.
* **Relevancy and timeliness:** information will be relative and timely to the public.
* **Completeness:** information will be more complete because of the use of collaborative tools .